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(54) Method and system for providing high quality images from a digital video stream

(57) A method and system for providing images from a server to a client over a communication medium with a limited bandwidth is described. In providing the images, a first location in a first video stream that is associated with a first image is identified. Data depicting the first image is then transmitted from the server to the client. In response to receiving a next image request from the client, the server determines a second location in the first video stream that has a particular positional

relationship in the first video stream relative to the first location. The server then transmits to the client as the next image a second image associated with the second location. The limited bandwidth of the communication medium is such that playing the first video stream in real time over the communication medium would produce images having a first image quality. However, the first and second images are transmitted at an image quality that is greater than the first image quality.

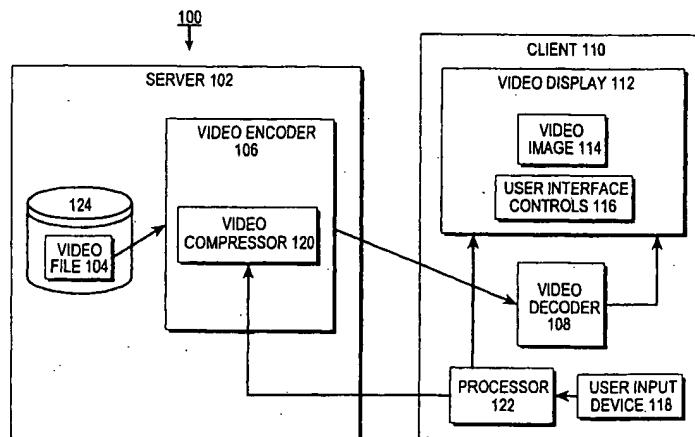


Fig. 1A



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EUROPEAN SEARCH REPORT

Application Number
EP 00 11 1312

DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
X	WO 98 41022 A (ERICSSON TELEFON AB L M) 17 September 1998 (1998-09-17) * abstract *	1,2,11, 12,21,22	H04N7/173
Y	* page 6, line 29 - page 9, line 14 *	3,9,10, 13,19, 20,23, 29,30	
A	* page 11, line 1 - line 3 * * page 13, line 4 - line 13 * * figure 2 *	4-7, 14-17, 24-27	
Y	---	3,9,13, 19,23,29	
A	EP 0 786 909 A (IBM) 30 July 1997 (1997-07-30) * page 2, line 40 - line 49 *	1,11,21	
A	* figure 4 *	1,11,21	
Y	---	10,20,30	
A	US 5 673 205 A (BRUNSON GORDON R) 30 September 1997 (1997-09-30) * abstract *	1,11,21	
A	* column 6, line 30 - line 45 *	1,11,21	
A	---	1,11,21	
A	WO 96 29818 A (BHARATH ANIL ;KITNEY RICHARD (GB); IMPERIAL COLLEGE (GB)) 26 September 1996 (1996-09-26) * abstract *	1,11,21	
A	* page 1, line 28 - page 2, line 11 *	1,11,21	
A	---	1,11,21	
A	EP 0 812 112 A (SUN MICROSYSTEMS INC) 10 December 1997 (1997-12-10) * abstract *	1,11,21	
A	* page 4, line 36 - page 5, line 10 *	1,11,21	
A	* figure 6 *	1,11,21	
	---	-/-	
<p>The present search report has been drawn up for all claims</p>			
Place of search	Date of completion of the search	Examiner	
THE HAGUE	2 November 2001	Fantini, F	
CATEGORY OF CITED DOCUMENTS		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 00 11 1312

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
A	<p>WO 99 00984 A (AHARONI AMIR ;ARIEL OREN (IL); KHIRMAN STAS (IL); TAITZ EUGENE (IL) 7 January 1999 (1999-01-07)</p> <p>* abstract *</p> <p>* page 3, line 16 - line 27 *</p> <p>* page 4, line 5 - line 13 *</p> <p>* page 5, line 20 - page 6, line 25 *</p> <p>-----</p>	1,11,21	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
<p>The present search report has been drawn up for all claims</p>			
Place of search	Date of completion of the search	Examiner	
THE HAGUE	2 November 2001	Fantini, F	
CATEGORY OF CITED DOCUMENTS		<p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>	
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 00 11 1312

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
 The members are as contained in the European Patent Office EDP file on
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02-11-2001

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 9841022	A	17-09-1998	US 6038257 A AU 6427398 A EP 0968606 A1 JP 2001514826 T WO 9841022 A1 TW 420933 B	14-03-2000 29-09-1998 05-01-2000 11-09-2001 17-09-1998 01-02-2001
EP 0786909	A	30-07-1997	US 5715176 A EP 0786909 A2 JP 9224244 A KR 233353 B1	03-02-1998 30-07-1997 26-08-1997 01-12-1999
US 5673205	A	30-09-1997	NONE	
WO 9629818	A	26-09-1996	AU 5012296 A WO 9629818 A1	08-10-1996 26-09-1996
EP 0812112	A	10-12-1997	US 6065050 A EP 0812112 A2 JP 10075436 A	16-05-2000 10-12-1997 17-03-1998
WO 9900984	A	07-01-1999	US 6014694 A AU 7928998 A EP 0992160 A1 WO 9900984 A1	11-01-2000 19-01-1999 12-04-2000 07-01-1999